

Notice of Allowability

Application No.

09/901,364

Examiner

Andrew L Oltmans

Applicant(s)

DEARNALEY ET AL.

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment and declaration filed November 7, 2003.
 2. ☒ The allowed claim(s) is/are 2-89,91-124,126-140,142-168,212,217 and 239-243.
 3. ☐ The drawings filed on _____ are accepted by the Examiner.
 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
 5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
 6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:
 - a. Claims 2-89, 91-124, 126-140, 142-168, 212, 217 and 239-243 are allowable over the prior art for the reasons set forth in the previous Office Action, mailed October 1, 2003.
 - b. In view of applicant's remarks, the declaration of the Mr. Geoffrey Dearnaley and the reference newly discovered by the examiner (Hay et al.), the rejection under 35 USC 112, second paragraph made in the previous Office Action has been withdrawn. The rejection under 35 USC 112, second paragraph was in response to the claim language, "GPa", which is a measurement of hardness, wherein the specific testing method is not recited in the specification. The applicant has asserted that the testing method is known in the art. In support of this proposition, the applicant submitted an article by Zhiyong Li et al. (attached to response filed July 23, 2003) and a declaration of Geoffrey Dearnaley under 37 CFR 1.132 (attached to response filed November 7, 2003). The Zhiyong Li et al. article mentions GPa, but does not limit the testing to a particular method. The declaration of Mr. Dearnaley acknowledges various methods, but insists that one of ordinary skill in the art would only use the Berkovich method of hardness testing because of the particular characteristics of the layers resulting from the claimed method. In view of the position set forth in the declaration of Geoffrey Dearnaley, the examiner conducted a search, wherein a reference supporting Mr. Dearnaley's position was discovered (see Hay et al., "Instrumented Indentation Testing", ASM Handbook, Volume 8, ASM Handbook Committee, 2000, pages 1-15 (hereinafter "Hay et al.")). Hay et al. teaches

that thin films, such as the coatings resulting from the claimed method, are preferably tested for hardness using the Berkovich method (see page 1, third paragraph and Figure 1; pages 7-8, Figure 6; and page 14, "Pyramidal Indenters"). In view of all of the above evidence, the examiner agrees with applicant that one of ordinary skill in the art would understand that GPa, as instantly claimed, refers to GPa resulting from a Berkovich hardness testing method.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Note Regarding Claims 218-238

NOTE: It is noted that claims 218-238 are not explicitly treated in the full list of claims. However, it is noted that page 23 of applicant's response filed November 7, 2003, 4th paragraph explicitly instructs that these claims are cancelled. Therefore, the examiner is treating 218-238 as cancelled.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Oltmans whose telephone number is 703-308-2594. The examiner can normally be reached from 7:00 am to 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'Andrew L. Oltmans', is positioned above the printed name.

Andrew L. Oltmans
Patent Examiner
Art Unit 1742

Alo
November 21, 2003